

***Remarks***

Reconsideration of this Application is respectfully requested.

Claims 1-3, 5, 6, 8-10, 14, 15, and 19-39 are pending in the application, with claims 1, 5, and 35-39 being the independent claims. No amendments have been made.

Based on the following remarks, Applicants respectfully request that the Examiner reconsider all outstanding objections and rejections and that they be withdrawn.

***Allowable Subject Matter/Claim Objections***

Applicants note the objection of claim 26, and also note with appreciation the indication that claim 26 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. However, Applicants choose not to rewrite dependent claim 26 in independent form at this time.

***Previously Submitted Statement of Substance of Examiner Interview***

Applicants respectfully thank the Examiner for extending the courtesy of a telephone interview to Applicants' representative on February 19, 2009, as indicated in the Interview Summary received with the July 7, 2009 Office Action. In accordance with M.P.E.P. §713.04, Applicants included a statement regarding the substance of the February 19, 2009 interview in the Reply to Office Action filed March 17, 2009.

Reply to Office Action of July 7, 2009

***Rejections under 35 U.S.C. § 103***

**Claims 1-3, 5, 6, 8-10, 14, 15, 19-25 and 28-39**

Claims 1-3, 5, 6, 8-10, 14, 15, 19-25 and 28-39 were rejected under 35 U.S.C. § 103(a) as being allegedly unpatenable over U.S. Pat. No. 5,623,600 to Ji et al. ("Ji") in view of U.S. Pat. No. 5,696,822 to Nachenberg ("Nachenberg"). Applicants respectfully traverse this rejection.

Independent claims 1, 5, and 35-39 recite features that distinguish over the cited references. Independent claim 1 recites, for example:

**"... receiving, at a model of a second computer, a status update communication from the second computer, the status update communication including pre-existing information on the second computer; updating and maintaining the model based on the status update communication, to reflect any changes to the second computer; receiving computer data from a first computer at the model of the second computer, the model having been maintained and updated prior to receiving the computer data; screening the computer data for at least one virus using the model..."**

Independent claim 5 recites, for example:

**"A virus screening system... to screen computer data for at least one virus when the computer data is transmitted between a first computer and a second computer, the virus screening device comprising: a third computer on the network that comprises a model of a second one of the first and the second computers, the model configured to be maintained and updated prior to receiving the computer data, based on pre-existing information on the second computer, to reflect any changes to the second one of the first and second computers and to screen the computer data from a first one of the first and second computers..."**

Independent claim 35 recites, for example:

**"...receiving computer data from a first computer at a model of a second computer; maintaining and updating the model prior to receiving the computer data, based on pre-existing information on the second computer, to reflect any changes to the second computer; screening the computer data for at least one virus using the model and producing a screening result..."**

Reply to Office Action of July 7, 2009

Independent claim 36 recites, for example:

"...means for receiving the computer data from a first computer, the means for receiving being configured as a **model of a second computer and being configured to be maintained and updated prior to receiving the computer data, based on pre-existing information on the second computer**, for any changes to the second computer; means for screening the computer data for at least one virus..."

Independent claim 37 recites, for example:

"receive computer data from a first computer at a model of a second computer; **maintain and update the model prior to receiving the computer data, based on pre-existing information on the second computer**, to reflect any changes to the second computer; screen the computer data for at least one virus using the model and producing a screening result "

Independent claim 38 recites, for example:

"causing an intermediary node to receive computer data from a first computer, the **intermediary node being a model of a second computer; causing the intermediary node to be maintained and updated prior to receiving the computer data, based on pre-existing information on the second computer**, to reflect any changes to the second computer; causing the intermediary node to screen the computer data for at least one virus using the model and producing a screening result"

Independent claim 39 recites, for example:

" **receiving, at a model of a destination computer, a status update communication from the destination computer, the status update communication including pre-existing information on the destination computer; maintaining the model of the destination computer prior to receiving data destined for the destination computer, based on the status update communication**; analyzing data destined for the destination computer to determine whether the data includes a virus"

At page 3 of the Office Action, the Examiner states that Ji fails to disclose or suggest:

"wherein the intermediary computer is a model of the second computer and receiving at a model of a second computer a status update communication from the second computer[, ] the status update communication including pre-existing information on the second

computer; updating and maintaining the model based on the status update communication[,] to reflect any changes to the second computer."

Rather, the Examiner relies on Nachenberg to allegedly remedy the deficiencies of Ji.

Nachenberg, which suffers the same deficiencies of Arnold, which was argued in the previous Response, is merely directed to "[a] Polymorphic Anti-Virus Module (PAM) (200) [that] comprises a CPU emulator (210) for emulating the target program," (Nachenberg, Abstract). FIG. 4A of Nachenberg illustrates an emulation process that includes a single preparing step before running a plurality of virus checks, and never checks to see if the emulator needs to be updated based on the CPU. Nachenberg teaches beginning with step 410: "Prepare Virtual Machine (Emulator)," and proceeding directly to step 414: "Load Next File," (Nachenberg, FIG. 4A, steps 410 and 414). Nacheneberg teaches "If all known viruses have been excluded 420 at step 418, the target file is deemed infection-free 440 and the next target file is loaded 414 for emulation. (Nachenberg, Col 10, lines 20-26.) Thus, Nachenberg's loop 414, 418, 420, 440, and 414 fails to disclose or suggest that the virtual machine is "maintained and updated prior to receiving the computer data, based on pre-existing information on the second computer," as recited, using respective language, in the independent claims. This is because, as is explicitly taught, Nachenberg fails to update or maintain the virtual machine *prior to* loading subsequent files for analysis, e.g., between step 440 and step 414, since it is clear that only one "preparing" step 410 is performed in Nachenberg for all virus scannings.

Any suggestion by the Examiner that the initializing or preparing of the virtual machine in Nachenberg includes the feature of our claims is mere speculation and conjecture with no support, either explicitly or implicitly, in Nachenberg. There is no

Reply to Office Action of July 7, 2009

teaching or suggestion in Nachenberg that could be construed to teach or suggest maintaining or updating the model, as recited using respective language in the claims. Absent some clear articulation, it therefore would not be obvious to update or maintain the virtual machine in view of Nachenberg.

Applicants respectfully assert that the Examiner's statements regarding Nachenberg improperly and impermissibly go beyond the disclosure of the reference and, rather than any evidence of record, find their basis only in speculation or impermissible hindsight. When determining whether a claim is obvious, an Examiner must make "a searching comparison of the claimed invention – including all its limitations – with the teaching of the prior art." *In re Ochiai*, 71 F.3d 1565, 1572 (Fed. Cir. 1995) (emphasis added). Thus, "obviousness requires a suggestion of all limitations in a claim." *CFMT, Inc. v. Yieldup Int'l. Corp.*, 349 F.3d 1333, 1342 (Fed. Cir. 2003) (citing *In re Royka*, 490 F.2d 981, 985 (CCPA 1974)). Furthermore, as the Supreme Court recently stated, "there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness." *KSR Int'l v. Teleflex Inc.*, 550 U.S. 398, 418 (2007) (quoting *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006) (emphasis added)). Applicants further disagree with the Examiner's improper conclusory statement. In *KSR* the Court noted that "[t]o facilitate review, this analysis should be made explicit." *KSR Int'l Co. v. Teleflex Inc.*, 127 S. Ct. 1727, 1740-41 (2007) (citing *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006) ("[R]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness")). *Id.* Further, it appears the Examiner is relying on improper speculation

Reply to Office Action of July 7, 2009

of what the reference *may* be teaching in the conclusory statements. In an exemplary post-KSR BPAI decision, *Ex Parte* Kamran Ahmed, Appeal 2007-2765, App. 09/526,442, Decided Feb. 11, 1008 at page 6, the Board opined “Further, a rejection based on section 103 must rest upon a factual basis rather than conjecture, or speculation. ‘Where the legal conclusion [of obviousness] is not supported by the facts it cannot stand.’ (quoting *In re Warner*, 379 F.2d 1011, 1017 (CCPA 1967)). See also *In re Kahn*, 441 F.3d at 988.” Also, on page 10 of *Ex Parte* Ahmed, the Board held the Examiner relied on improper speculation, and reversed the obviousness rejection. Finally, the Supreme Court also confirmed that, “[a] fact finder should be aware, of course, of the distinction caused by hindsight bias and must be cautious of arguments reliant upon ex post reasoning.” *KSR Int’l Co. v. Teleflex Inc.*, 127 S. Ct. 1727, 1742 (2007).

Further, the above-noted distinguishing features are not implicit or inherently disclosed in Nachenberg as they are not necessarily present, and any argument otherwise could only improperly be based on possibilities or probabilities of what Nachenberg discloses. *See, e.g., In re Oelrich*, 666 F.2d 578, 581 (C.C.P.A. 1981) (stating that the missing elements must be necessarily present in the thing described in the reference for it to prove anticipation) (citing *Hansgrig v. Kemmer*, 102 F.2d 212, 214 (C.C.P.A. 1939)); M.P.E.P. Section 2112(IV) (stating in relevant part, “[t]he fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish inherency of that result or characteristic” (emphasis in the original) (citation omitted) and “[t]o establish inherency, the extrinsic evidence ‘must make clear that the missing descriptive matter is necessarily present in the thing described in the reference ... Inherency, however, may not be established by probabilities or possibilities. The mere

fact that a certain thing may result from a given set of circumstances is not sufficient.”  
(citations omitted)).

Therefore, as Nachenberg, without improperly relying on speculation, conjecture, inherency, or hindsight, does not cure the noted deficiencies of Ji, the applied references cannot be used to establish a prima facie case of obviousness for claims 1, 5, and 35-39.

Accordingly, Applicants respectfully request that the rejection of claims 1, 5, and 35-39 be reconsidered and withdrawn. Also, at least based on their respective dependencies to claims 1 and 5, claims 2, 3, 6, 8-10, 14, 15, 19-25 and 28-34 should be found allowable, as well as for their additional distinguishing features.

**Claim 27**

Claim 27 was rejected under 35 U.S.C. § 103(a) as allegedly being unpatenable over Ji in view of Nachenberg, further in view of U.S. Pat. No. 6,826,698 to Minkin et al. ("Minkin"). For the reasons set forth below, Applicants respectfully traverse this rejection.

Claim 27, which depends from independent claim 1, also distinguishes over the combined teaching of Ji and Nachenberg for reasons similar to those set forth above with respect to independent claim 1, and further in view of its own features. At page 14 of the Office Action, the Examiner states, which Applicants do not acquiesce to, that Minkin discloses switching between allowing and disallowing screening based on enabling/disabling signals. Even assuming this is correct, Minkin is not stated to teach or suggest, nor does Minkin teach or suggest, at least the above-noted the distinguishing features of claim 1. Thus, Minkin fails to cure the deficiencies of the combined teaching

Reply to Office Action of July 7, 2009

of Ji and Nachenberg, as noted above. Therefore, claim 27 is patentable over Ji, Nachenberg, and Minkin, taken alone or in combination, for at least the reasons provided above.

Accordingly, Applicants respectfully request that the rejection of dependent claim 27 be reconsidered and withdrawn.

***Conclusion***

All of the stated grounds of objection and rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently outstanding objections and rejections and that they be withdrawn. Applicants believe that a full and complete reply has been made to the outstanding Office Action and, as such, the present application is in condition for allowance. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

Prompt and favorable consideration of this Amendment and Reply is respectfully requested.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.

Jason D. Eisenberg  
Attorney for Applicants  
Registration No. 43,447

Date: 8/25/09

1100 New York Avenue, N.W.  
Washington, D.C. 20005-3934  
(202) 371-2600  
1005414\_1.DOC